

A complete set of claims incorporating all amendments is attached hereto.

REMARKS

In response to the Office Action of March 4, 2003, claims 1 and 17 have been amended.

The rejection of claims 1, 2, 4, 5, 13 and 15-19 as "clearly anticipated" by Ruszkowski, Jr. is traversed. This reference does not disclose "an integrated, compact, self-contained surveillance unit" as set forth in claim 1. First, as is evident from Figure 2 of this reference "target locator 12" is not compact in any sense of the word. Rather, it resembles a rifle and is intended to be held like a rifle when in use. See Figure 1 and col. 8, *ll.* 1-6 ("The most common method of 'firing' target locator 12 will probably be from a prone position on the ground.") Second, Ruszkowski, Jr. does not disclose a self contained unit, but rather separate, disparate devices. As is evident from Figures 1 and 3, the "Portable Target Locator System" consists of two units: a "rifle-like target locator 12" and a "transmitter/modem 14." See Figures 1 and 3, col. 3, *ll.* 55-57. Thirdly, Ruszkowski, Jr., does not disclose a surveillance unit, but rather a device that is intended solely as a target locator. This reference does not disclose any mechanism to extract information from a target other than its position relative to a stationary user.

In paragraph 2 of the Office Action, the Examiner appears to take the position that Applicants' claimed "sensor means" is disclosed by the "sighting system 52" of Ruszkowski, Jr. (referencing col. 6, *ll.* 6-15) and "azimuth and elevation sensor 50" (referencing col. 5, *ll.* 30-33). Applicants agree that sighting system 52 constitutes a sensor system (as set forth in claim 1), but are baffled as to the reference to col. 5, *ll.* 30-33. It appears to be totally inconsistent with the first subparagraph of paragraph 2 (which is apparently a reference to claim 2). Applicants agree that, col. 3, *ll.* 57-63 makes reference to GPS "satellites 16" and that locator 12 includes a GPS receiving antenna 36 which is "coupled to GPS processor 38" (see col. 4, *ll.* 29-45 and Figure 4 (upper right hand corner)). Applicants agree that antenna 36 and processor 38 are used for determining position. However, neither of these two components, either alone or in combination with each other, constitute a "communication means" as set forth in claim 1, subparagraph (d). This is evident to Applicants in claim 1 as filed. To avoid any

possible confusion subparagraph (d) has been clarified to state: "means, attached to said housing means, for sending communications from said unit." No change in scope is intended. In sharp contrast, the communication means of Ruskowski, Jr. is the separately housed "transmitter/modem 14."

In addition to the reasons set forth above with regard to the non-anticipation of claim 1, Ruskowski, Jr. does not disclose any "means for determining the motion of said unit," as set forth in claim 5. Again, col. 3, ll. 57-63, refers to GPS signals which are processed (via processor 38) to "determine the location coordinates of target locator 12." Location is where something is; it is not the same as motion.

As to claim 13, there is no means or requirement for digital signal processing in Ruskowski, Jr. The language in col. 5, ll. 50-65 makes no reference to digital signal processing. It merely states that "processor 44" is an "appropriately programmed microprocessor" which (based on GPS information, range information, and azimuth and inclination information) can "accurately determine the position coordinates for any desired target." Further, there is no disclosure of Applicants' claimed "field programmable gate array means."

In the comment "the heads-up display was assembled into the weapon so naturally it can somehow be removed," the Examiner is using the word remove in a totally different sense than that used by Applicants. From col. 6, ll. 16-19, it is clear that "display 42" is integrated into sighting system 52. It's not a separate, removable unit. To avoid any possible ambiguity, Applicants have amended claim 17 to specify that "said image output means includes a heads up display which can be detached from said housing while remaining connected to said computer means." No change in scope is intended.

The anticipation rejection of claims 18 and 19 is also traversed. While Ruskowski, Jr. discloses a "key pad 40," it is strictly for entering location data "[i]n the event the GPS capability is disabled or unavailable." See, for instance, col. 4, ll. 46-49. A keypad is not a touchpad. More importantly, there is no "means for manipulating data."

The rejection of claim 3 as obvious over Ruszkowski, Jr. considered with Hansen is traversed. Hansen discloses splitting incoming radiation into the far IR spectrum, the near IR spectrum and visible light. He uses an uncooled focal plane array 18 in conjunction with a cathode ray tube display 26 to convert far IR into a visible image. There is no suggestion in either reference to support the Examiner's position that it would be obvious to modify Ruszkowski, Jr. with Hansen. A total redesign of Ruszkowski, Jr.'s sighting system would be required, if that were possible. It is submitted that the combination is not suggested by the references but by Applicants' disclosure.

Likewise, Applicants traverse the rejection of claims 6-8. First, as with all the dependent claims, the underlying position of the Examiner that Ruszkowski, Jr. anticipates all of the structure of claim 1 is incorrect. The Examiner's rejection of intermediate parent claim 5 has also been traversed as Ruszkowski, Jr. does not disclose any "means for determining motion." The GPS component only determines location. The range finder and azimuth and elevation sensor are used to determine the location of the potential target relative to the position of target locator 12. None of these are motion detectors. Michel does disclose the use of accelerometers "which, at rest, indicates the direction relative to the vertical." See col. 5, *ll.* 5-7. There is no other reference to accelerometers. The preferred embodiment discloses sensors 61 (a magnetometer) and 62 (an inclination meter). The weapon 80 has a "combined elevator and bearing sensor." See col. 8, *ll.* 21-23 and *ll.* 34-37. Thus, it is clear that Michel et al. does not utilize accelerometers to determine the motion of a weapon. Secondly, there is no need to modify target locator 12 with motion sensors. It makes no sense to do so since Ruszkowski, Jr. wants to avoid motion. See col. 7, *l.* 66 - col. 8, *l.* 6. Please note the use of the term "stabilize" at col. 8, *l.* 5. Thus, the rejection of claims 6-8 is additionally traversed.

The rejection of claim 9 is traversed for the reasons set forth with regard to claim 1 and 4. Applicants see no disclosure in Janky et al. of using both GPS and GLONASS in the same instrument. They use one or the other. Thus, the only disclosure of using both is Applicants', not either reference of record. Thus, the rejection of claim 9 on this reference is additionally traversed.

In addition to reasons specified for parent claim 1, the obviousness rejection of claims 10-12 is also traversed. First, there is no bidirectional communication. Further, nowhere does Ruszkowski, Jr. reference a "multi-mode patch antenna." Ruszkowski, Jr. repeatedly refers to his "GPS receiving antenna 36" which is a single mode antenna. Further, the antenna 36 is not a communication means but simply part of the GPS position determining mechanism. As previously stated, the communication means of Ruszkowski, Jr. is transmitter/modem 14. See Figure 1, col. 3, ll. 55-63 and col. 6, ll. 55-57. While Doyle et al. disclose two-way communication, it is for an entirely different purpose, namely to enhance safety among a group of hunters. Thus, there is no motivation to modify the target locator of Ruszkowski, Jr. He is not concerned with safety, but with destruction.

The rejection of claim 13 and 14 is traversed for the reason set forth with regard to claim 1, and because there is no motivation in either Ruszkowski, Jr. or Samuel et al. to incorporate a temperature sensor in target locator 12. Ruszkowski, Jr. is not concerned with calculating an aiming point, because locator 12 is not doing any ballistics computation.

In view of the foregoing it is submitted that this application is in condition for allowance.

Respectfully submitted,

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We claim:

- SWB1
- A1
1. (Currently Amended) An integrated compact, self contained surveillance unit, said unit comprising:
 - (a) housing means;
 - (b) sensor means attached to said housing means;
 - (c) means, attached to said housing, for determining the position of said unit;
 - (d) means, attached to said housing means, for sending communications from said unit;
 - (e) computer means attached to said housing means, said computer means connected to said sensor means, said position determination means, and said communication means; and
 - (f) image output means attached to said housing means and connected to said computer means.
 2. (Original) The surveillance unit of claim 1, wherein said sensor means includes a sensor selected from the group including visible sensors, UV sensors, short wavelength infrared sensors and long wavelength infrared sensors.
 3. (Original) The surveillance unit of claim 2, wherein said sensor means also includes uncooled focal plane array.
 4. (Original) The surveillance unit of claim 1, wherein said position determination means includes GPS position determination means.
 5. (Original) The surveillance unit of claim 4, further means for determining the motion of said unit.

6. (Original) The surveillance unit of claim 5, wherein said motion determination means is an accelerometer.
7. (Original) The surveillance unit of claim 6, further including means for determining direction.
8. (Original) The surveillance unit of claim 7, wherein said GPS position determination means is coupled to said accelerometer, said means for determining direction, said computer means and said communications means.
9. (Original) The surveillance unit of claim 4, wherein said position determination means also includes GLONASS position determination means, said GLONASS position determination means coupled to both said computer means and said communication means.
10. (Original) The surveillance unit of claim 1, wherein said communication means is bi-directional.
11. (Original) The surveillance unit of claim 10, wherein said communication means includes multi-mode patch antenna.
12. (Original) The surveillance unit of claim 10, wherein said communication means includes RF communication means.
13. (Original) The surveillance unit of claim 1, wherein said computer means includes digital signal processing means, field programmable gate array means, and memory means.
14. (Original) The surveillance unit of claim 1, further including temperature sensing means connected to said computer means.
15. (Original) The surveillance unit of claim 1, further including power supply means.

16. (Original) The surveillance unit of claim 15, wherein said power supply means is a battery.

17. (Currently Amended) The surveillance unit of claim 1, wherein said image output means includes a heads up display which can be detached from said housing while remaining connected to said computer means..

M 18. (Original) The surveillance unit of claim 1, further including means for manipulating data by the user of said surveillance unit .

19. (Original) The surveillance unit of claim 1, wherein said information manipulating means is a touchpad.
